### **Project Descriptions for December 14, 2016**

## **Board of Trustees Meeting**

### **Clean Water Commitments**

#### **Brockton CW-16-27**

This project provides an update to the infiltration/inflow (I/I) study conducted by the City in 1998. There have been significant upgrades to the sewer system since then, but the sewer system flow data shows that the collection system is still susceptible to both infiltration and inflow. The purpose of the 2016 Sewer Flow Monitoring Program is to redevelop estimates of I/I contribution from the same drainage sub-areas within the City's sewer collection system which were metered in 1997 and 1998. The flow monitoring program will identify the general location and extent of I/I entering the sewer system. The findings will help prioritize and phase the follow-up sewer system evaluation survey work, which will identify areas throughout the sewer collection system which need to be rehabilitated or replaced. These recommendations will provide a road map for rehabilitation of the City's wastewater collection system over the next decades. Also, further reductions in I/I will create additional capacity for future connections to the wastewater collection system and treatment plant and minimize sanitary sewer overflows within the sewer collection system.

#### **Brockton CW-16-28**

The goal of this planning project is to address the bacterial water quality impairments in the Taunton River watershed by constructing improvements to the drainage and/or sewer systems. As the first step in addressing the bacteria within the stormwater discharges, the City must develop a comprehensive watershed wide plan that identifies deficiencies and provides recommendations to address and prioritize water quality concerns. It is intended that this planning project will develop the plan that identifies sources of cross contamination and will allow for the development of further recommendations.

# **Drinking Water Commitments**

### Chicopee DW-16-04

The City of Chicopee's source of drinking water is the Chicopee Aqueduct, which is owned and maintained by the Massachusetts Water Resources Authority. The City's transmission main from this source is a single 36-inch diameter cast iron main. With no redundant transmission main, a majority of the City is at risk of losing water, if the single transmission line goes down. Depending on where the damage to the existing main occurs, service could be lost for an extended period of time. Construction of the second main also allows repairs and upgrades to be made to the existing 36-inch main, without interruption in service. The project will also replace the existing gaseous chlorine system with a sodium or calcium hypochlorite system to improve safety and performance of the transmission main.

### **Clean Water Agreements**

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#### Lawrence CW-14-16

Wastewater from the City of Lawrence is part of the GLSD system which discharges into the Merrimack River. The current NPDES permit became effective in 2005 and required all members of GLSD to develop Infiltration/ Inflow (I/I) Control Programs to find, document and eliminate I/I sources within their respective systems. The City of Lawrence completed several of the required tasks and over the past year began portions of the Phase I and II Sewer System Evaluation Survey (SSES) and Capacity, Management, Operations and Maintenance (CMOM) work. The current project, sewer system rehabilitation and high priority pipe replacement, includes cast-in-place-pipe lining (CIPP) and replacement of sewer main in areas across the City.

#### Plymouth CWP-16-07

This project is for the emergency sewer forcemain repair and replacement in the Town of Plymouth, that is needed due to several breaks and resulting findings of excessive deterioration of the existing 30 inch ductile iron forcemain. The project will consist of three contracts: 1A) Emergency Response and bypass systems, 1B) Existing Forcemain- Slipline and Replacement, and 2 Redundant 24" sewer forcemain.

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